

REMARKS

Claims 1-17 are now pending in the present application. Claims 1, 2, 3, 6, 8, 10, and 11 are amended above. New claims 12-17 are added above. No new matter is added by the claim amendments or new claims. Entry is respectfully requested.

The Abstract of the disclosure is objected to for reasons stated in the Office Action. The Abstract is amended in a manner that is believed to overcome the objection. Entry of the amendments to the Abstract and removal of the objection are respectfully requested.

Claims 1-11 are objected to for reasons stated in the Office Action. Claims 1, 3, and 8 are amended above in accordance to suggestions made in the Office Action at page 2, section 2. Claim 10 is amended to state that the first determination circuit comprises "a register" and "a comparing circuit". The former titles "first register" and "third comparing circuit" of former claim 10 are removed. Claim 11 is amended to state that the second determination circuit comprises "a register" and "a comparing circuit". The former titles "second register" and "fourth comparing circuit" of former claim 11 are removed. Claims 10 and 11 remain dependent on claim 8. Entry of the amendments and removal of the objections are respectfully requested.

The Applicants note with appreciation that page 6, section 9 of the Office Action indicates that claims 3-6 would be allowable if written in independent form. New independent claim 12 is amended above to include the limitations of former claims 1 and 3. Entry and allowance of new independent claim 12 and new claims 13-17 dependent thereon are respectfully requested.

The Applicants note with appreciation that page 6, section 10 of the Office Action indicates that claims 8-11 would be allowable if amended to overcome the objections set forth in page 2, section 2 of the Office Action. It is submitted that independent claim 8 and dependent claims 10 and 11 are amended above in a manner that is believed to overcome the objections.

Entry of the amendment, removal of the objections, and allowance of independent claim 8 and claims 9-11 dependent thereon are therefore respectfully requested.

Claims 1, 2, and 7 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yang, *et al.* (U.S. Patent No. 5,546,543 - hereinafter "Yang") in view of Brown, *et al.* (U.S. Patent No. 6,397,287 - hereinafter "Brown"). Reconsideration and removal of the rejections, and allowance of the claims, are respectfully requested.

In the present invention as claimed in amended independent claim 1, a "vacancy level of data" in a "transmitting buffer" and an "occupancy level of data" in a "receiving buffer" are compared, and it is determined whether either of the "vacancy level of the transmitting buffer" or the "occupancy level of the receiving buffer" is increasing. Access to the system bus is granted in response to the comparison result and the determination result. This feature of the method of the present invention is described at least with reference to FIG. 3 of the present specification, elements 330, 331, and 332. The comparison between the vacancy level of the transmitting buffer and the occupancy level of the receiving buffer is depicted at least at element 330, the determination of whether the vacancy level of the transmitting buffer is increasing is depicted at least at element 331, and the determination of whether the occupancy level of the receiving buffer is increasing is depicted at least at element 332. Granting of access to the bus to the transmitting buffer or receiving buffer is depicted at least at elements 351, 352, 353, and 354.

It is submitted that the combined teachings of Yang and Brown fails to teach or suggest the present invention as claimed in claim 1. In particular, neither reference teaches or suggests "comparing a vacancy level of data in the transmitting buffer and an occupancy level of data in the receiving buffer", as claimed in claim 1. Neither reference teaches or suggests making such a comparison between the vacancy level and the occupancy level. Nor does either reference teach or suggest "granting access to the system bus to one of the transmitting buffer and the receiving buffer based on the comparison result...", as claimed in claim 1. System bus access is not based on such a comparison in either Yang or Brown.

In addition, neither reference teaches or suggests "determining whether at least one of the vacancy level of the transmitting buffer and the occupancy level of the receiving buffer is increasing", as claimed in claim 1. Neither reference teaches or suggests making such a determination of whether the vacancy level or the occupancy level is increasing. Nor does either reference teach or suggest "granting access to the system bus to one of the transmitting buffer and the receiving buffer based on the ... determination result" as claimed in claim 1. System bus access is not based on such a determination in either Yang or Brown.


Accordingly, it is submitted that Yang and Brown, taken alone or in combination, fail to teach or suggest the invention set forth in amended claim 1. Since the combination of Yang and Brown fails to teach or suggest the invention set forth in amended claim 1, the claim is believed to be allowable over the cited references. With regard to dependent claims 2 and 7, it follows that these claims should inherit the allowability of independent claim 1 from which they depend. Accordingly, reconsideration and removal of the rejections of claims 1, 2, and 7 under 35 U.S.C. 103(a) based on Yang and Brown, and allowance of claims 1, 2, and 7 are respectfully requested.

Closing Remarks

It is submitted that all claims are in condition for allowance, and such allowance is respectfully requested. If prosecution of the application can be expedited by a telephone conference, the Examiner is invited to call the undersigned at the number given below.

Respectfully submitted,

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